NOTE

This Microfiche meets the quality requirements of the American National Standard for Microfiche of Documents (ANSI PH5.9-1975). However, because of imperfections in the document from which it was made, it contains images that are illegible or difficult to read. The source document for this microfiche is the best copy that could be obtained prior to filming.

CIS Congressional Information Service, Inc.
Washington, D.C.

THE YOUNG ASTRONAUT PROGRAM MEDAL ACT

HEARING

BEFORE THE

SUBCOMMITTEE ON
CONSUMER AFFAIRS AND COINAGE

OF THE

COMMITTEE ON
BANKING, FINANCE AND URBAN AFFAIRS
HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

SECOND SESSION

ON

H.R. 2578

A BILL TO PROVIDE FOR THE STRIKING OF MEDALS TO COMMEMORATE THE YOUNG ASTRONAUT PROGRAM

APRIL 22, 1986

Serial No. 99-70

Printed for the use of the Committee on Banking, Finance and Urban Affairs

U.S. GOVERNMENT PRINTING OFFICE

60-208 O WASHINGTON : 1986

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

H241-38

HOUSE COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS

FERNAND J. ST GERMAIN, Rhode Island, *Chairman*

HENRY B. GONZALEZ, Texas
FRANK ANNUNZIO, Illinois
PARREN J. MITCHELL, Maryland
WALTER E. FAUNTROY, District of Columbia
STEPHEN L. NEAL, North Carolina
CARROLL HUBBARD, JR., Kentucky
JOHN J. LAFALCE, New York
STAN LUNDINE, New York
MARY ROSE OAKAR, Ohio
BRUCE F. VENTO, Minnesota
DOUG BARNARD, JR., Georgia
ROBERT GARCIA, New York
CHARLES E. SCHUMER, New York
BARNEY FRANK, Massachusetts
BUDDY ROEMER, Louisiana
RICHARD H. LEHMAN, California
BRUCE A. MORRISON, Connecticut
JIM COOPER, Tennessee
MARCY KAPTUR, Ohio
BEN ERDREICH, Alabama
SANDER M. LEVIN, Michigan
THOMAS R. CARPER, Delaware
ESTEBAN E. TORRES, California
GERALD D. KLECZKA, Wisconsin
BILL NELSON, Florida
PAUL E. KANJORSKI, Pennsylvania
BART GORDON, Tennessee
THOMAS J. MANTON, New York
JAIME B. FUSTER, Puerto Rico

CHALMERS P. WYLIE, Ohio
STEWART B. McKINNEY, Connecticut
JIM LEACH, Iowa
NORMAN D. SHUMWAY, California
STAN PARRIS, Virginia
BILL McCOLLUM, Florida
GEORGE C. WORTLEY, New York
MARGE ROUKEMA, New Jersey
DOUG BEREUTER, Nebraska
DAVID DREIER, California
JOHN HILER, Indiana
THOMAS J. RIDGE, Pennsylvania
STEVE BARTLETT, Texas
TOBY ROTH, Wisconsin
ROD CHANDLER, Washington
AL McCANDLESS, California
JOHN E. GROTBERG, Illinois
JIM KOLBE, Arizona
J. ALEX McMILLAN, North Carolina

SUBCOMMITTEE ON CONSUMER AFFAIRS AND COINAGE

FRANK ANNUNZIO, Illinois, *Chairman*

FERNAND J. ST GERMAIN, Rhode Island
HENRY B. GONZALEZ, Texas
PARREN J. MITCHELL, Maryland
STEPHEN L. NEAL, North Carolina
DOUG BARNARD, JR., Georgia
BRUCE A. MORRISON, Connecticut

JOHN HILER, Indiana
CHALMERS P. WYLIE, Ohio
THOMAS J. RIDGE, Pennsylvania
TOBY ROTH, Wisconsin
JIM KOLBE, Arizona

CONTENTS

	Page
Text of H.R. 2578	3

WITNESSES

Akroyd, Susan G., young astronaut chapter leader and assistant principal at Hutchison Elementary School, Herndon, VA	36
Prepared statement	39
Anderson, Jack, syndicated columnist, and chairman, Young Astronaut Council	6
Prepared statement	11
Billingsley, Peter, actor and spokeskid for the Young Astronaut Program	24
Prepared statement	26
DeCair, Thomas P., Associate Administrator for External Affairs, NASA	20
Prepared statement	22
Methia, Richard A., teacher and 1 of the 10 finalists in the Teacher in Space Program	28
Prepared statement	30
Sternburg, Kira, young astronaut member, Piney Branch Elementary School, Takoma Park, MD	33
Prepared statement	35

MATERIAL SUBMITTED FOR INCLUSION IN THE RECORD

Nichols, Nichelle, statement	44

THE YOUNG ASTRONAUT PROGRAM MEDAL ACT

TUESDAY, APRIL 22, 1986

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CONSUMER AFFAIRS AND COINAGE,
COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS,
Washington, DC.

The subcommittee met at 10 a.m. in room 2128 of the Rayburn House Office Building, Hon. Frank Annunzio (chairman of the subcommittee) presiding.

Present: Chairman Annunzio, Representatives Hiler and Wylie.

Chairman ANNUNZIO. The meeting of the subcommittee will come to order.

The Young Astronaut Program, sponsored by the nonprofit Young Astronaut Council, is designed to increase interest and skill in math and science among elementary and junior high school students, using the excitement of the Space Program. The Young Astronaut Program seeks to reach all students in the Nation, urban and rural, public and private, gifted and handicapped.

Last September the council launched its "Decade of Discovery." This marks an exciting period during which the council will help our Nation's schoolchildren meet the challenges of today's emerging technology. The program will assure that America maintains its position as a world leader in science and technology.

We trail other industrialized nations in our relative lack of emphasis, curricula, and teaching of math and science. The National Institute of Education has concluded that the United States has less higher skilled manpower than an information based, high-technology society requires for the future. The Young Astronaut Program will help correct this deficiency.

To assist the council in meeting this goal and to commemorate the "Decade of Discovery," H.R. 2578 authorizes the U.S. Mint to strike up to 750,000 gold, silver, and bronze medals for the council to sell to the public. The council will pay the mint for the cost of manufacture plus a 10-percent surcharge. The proceeds from the sales to the public will help the council fulfill its goal of having a Young Astronaut Program in every elementary and junior high school in America.

The terrible disaster that befell the space shuttle *Challenger* on January 28 was particularly disturbing to our Nation's schoolchildren. They had eagerly looked forward to hearing the first teacher in space give science lessons in space from the shuttle. Though their sense of loss is deep, their interest in space remains unquenched.

These medals and the program they commemorate and support are an appropriate memorial to the six astronauts and the teacher who rode with them on the brief and tragic final journey of the *Challenger*.

H.R. 2578 is cosponsored by 222 Members of the House, more than a majority. The cosponsors recognize that this program, at no cost to the Federal Government—and I emphasize no cost—will help meet an important national educational goal.

Our children still look to space and space exploration for inspiration and wonder. The Young Astronaut Program capitalizes on that excitement to give them the math and science skills to reach the stars they gaze at. Passage of H.R. 2578 will help them fulfill the dream.

[The text of H.R. 2578 follows:]

I

99TH CONGRESS
1ST SESSION

H. R. 2578

To provide for the striking of medals to commemorate the Young Astronaut Program.

IN THE HOUSE OF REPRESENTATIVES

MAY 22, 1985

Mr. ANNUNZIO introduced the following bill; which was referred to the Committee on Banking, Finance and Urban Affairs

---

A BILL

To provide for the striking of medals to commemorate the Young Astronaut Program.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "Young Astronaut Program Medal Act".

MEDALS

SEC. 2. (a) In commemoration of the Young Astronaut Program and its educational objectives, the Secretary of the Treasury shall strike and deliver to the Young Astronaut Council not more than 750,000 medals with suitable emblems, devices, and inscriptions to be determined by the Sec-

retary after consultation with the Council and the Commission of Fine Arts.

(b) The medals, which may be disposed of by the Council at a premium, may be delivered at such times as may be required by the Council in quantities of not less than 2,000, except that no medals shall be struck by the Secretary after December 31, 1987.

COSTS

SEC. 3. (a) The Secretary shall cause such medals to be struck and delivered at not less than the cost of manufacturing such medals (including labor, materials, dies, use of machinery, and overhead expenses) plus a surcharge equal to 10 percent of such cost of manufacturing.

(b) Security satisfactory to the Director of the Mint shall be furnished to indemnify the United States for full payment of such costs.

METAL CONTENT

SEC. 4. The medals authorized to be struck and delivered under this Act shall be struck in gold, silver, and bronze and in such size or sizes as shall be determined by the Secretary in consultation with the Council.

NATIONAL MEDALS

SEC. 5. The medals provided for in this Act are national medals for purposes of chapter 51 of title 31, United States Code.

EXAMINATION OF RECORDS

SEC. 6. The Comptroller General of the United States shall have the right to examine all books, documents, and other records of the Council which are related to the medals authorized under this Act, including all books, documents, and records regarding the marketing of such medals.

DEFINITIONS

SEC. 7. For purposes of this Act—

(1) the term "Council" means the Young Astronaut Council; and

(2) the term "Secretary" means the Secretary of the Treasury.

○

Chairman ANNUNZIO. Now I want to recognize Mr. Wylie.

Mr. WYLIE. Thank you very much, Chairman Annunzio. I certainly want to compliment you again for your timely hearing on this exciting program. The panel must know that Chairman Annunzio is one of those chairmen who gets things done, and he has been responsible for many very wonderful projects which have come through this subcommittee.

I want to especially welcome Jack Anderson, a most famous columnist who proposed the idea of the Young Astronaut Program, as I understand it, to the President, and the President thought it was a good idea and accepted the program up front. It has already been passed by the Senate.

I wish to express my own support for the program and would remind the panel that I am a cosponsor of the bill.

So without further ado, I think it is better to hear from the panel than to hear more from me, Mr. Chairman.

Thank you very much.

Chairman ANNUNZIO. Mr. Wylie. Thank you very much.

Our first witness this morning is Jack Anderson, syndicated columnist and radio and television commentator. Jack Anderson is one of the most widely read columnists in this country. His daily column is carried in some 1,000 newspapers and read by tens of millions of people. But Jack is more than just a columnist, he may well be the newsprint conscience of our country.

When President Reagan wanted to find out who was the most trusted and best-read newspaper reporter in the Nation, he asked his private pollster, Richard Wirtlin, to find an answer to the question. Wirtlin reported to the President that Jack Anderson was the best-read and most trusted reporter.

Former White House Press Secretary Ron Nessen said of Jack Anderson, "Anderson exposes the bad guys and does the stories that no other reporters have the guts, contacts, or determination to do." Yes, Jack Anderson has so many contacts across the Nation, that it is rumored that if you want to leak a story to Jack Anderson, you have to take a number and wait in line." [Laughter.]

Jack has won virtually every journalism award possible, including the Pulitzer Prize, but his greatest accomplishment, he claims, are 9 children and 13 grandchildren.

Mr. Anderson, you can proceed in your own manner.

STATEMENT OF JACK ANDERSON, SYNDICATED COLUMNIST, AND CHAIRMAN, YOUNG ASTRONAUT COUNCIL

Mr. ANDERSON. Thank you, Mr. Chairman.

I listened to the introduction with grateful embarrassment.

There was one error. It is 14 grandchildren now. [Laughter.]

Chairman ANNUNZIO. I can appreciate that. People ask me how many grandchildren I have, and I tell them six grandsons, and I then immediately bounce back. I says, "Oh, no, 2 months ago, we had another grandchild, and we finally got a daughter. Now we have six boys and one girl. A total of seven." [Laughter.]

Mr. ANDERSON. I am chairman of the Young Astronaut Council, and I am particularly pleased to be backstopped here by some of our young astronauts. They have come in this morning from the

Avondale School, and you see them behind me, plus those on either side. I am flanked by young astronauts.

I have asked to appear before the subcommittee to urge the passage of H.R. 2578, the Young Astronaut Program Medal Act.

In behalf of a quarter-million young astronauts who have already enrolled in the program and the million children who are expected to enroll by the end of this year, I want to thank the man who introduced this bill, a leader and stalwart of the Congress, your own chairman, Frank Annunzio. Congressman Annunzio has moved out in front of the millions of concerned Americans who will never take a back seat but are determined to stay in the driver's seat as mankind soars into space. For his leadership, Chairman Annunzio has earned the gratitude of young astronauts in all 50 States and 18 foreign countries. And if I know these warm, willing, wonderful children, he will be receiving unsolicited thank you letters from many of them.

H.R. 2578, if enacted, will give the Young Astronaut Program the impetus it needs to prepare our children for the 21st century.

The youngsters who started school this year will graduate from college in the 21st century in a fabulous age of exploration, with distant planets within their reach. Our children can lead America into a new era of discovery, achievement, and prosperity beyond imagination, or they can inherit a second-rate America, unable to cope with its multiplying problems and shrinking resources.

Admittedly, today is a difficult time to be young. Our children have become jaded and bored, beset by harmful diversions and short on emulations to excellence. Yet a free society cannot drive its youth to excellence—they must be inspired.

Every generation should have a dream to inspire it and adventure to ennoble it. Happily, never has circumstance held forth to young people an incentive to rise above themselves such as space now offers. For half a millennium, the spirit of maximum adventure has awaited the dawn of a new age of Columbuses and Magellans. Now, for our children, it is at hand on a scale infinitely more vast.

Young people are already fascinated by space. To channel that fascination into the hot pursuit of the studies required for the exploration and settlement of other worlds, to make school work less forbidding by dramatizing that it is the key to the universe beyond, to attract students to the disciplines that prerequisite to tackling the challenge of the starts—that is the objective of the young astronauts.

President Reagan has established the Young Astronaut Program as a catalyst to stimulate interest in the technologies of tomorrow. The purpose is not necessarily to train future astronauts nor to transform our youth into scientists. Whatever careers they choose, they will need to understand the terminology and use the tools of the technological age. The purpose is to shake young Americans out of the doldrums and prepare them for the technological challenge.

I regret to report that our kids are woefully ill-prepared for the future. They must master computers, lasers, robots, and microwaves; they must understand advanced math, physics, electronics, and the rest. This will be absolutely essential in the next decade.

Otherwise, they won't be able to operate the everyday equipment of the future. Yet as the technological challenges have increased, the educational standing of young Americans has fallen. Our schools do not adequately teach the scientific skills that will be needed after graduation.

There was a time when passionate respect for education seemed to be a hallmark of American life. We were the first people to embrace the goal of free schooling, not just for a privileged elite but for all the people. The sacrifices made by earlier generations of Americans to get their children educated are legends that are true. The school complexes that today dominate even our smallest towns, flanked by their fleets of yellow buses are pervasive testimony to a continuing commitment. But if the commitment is broad, it is also thin, so thin that education in America is today falling dangerously behind that of other advanced nations.

Now we put up the buildings, and we hand out diplomas by the millions, but the quality of education has declined. In comparative tests, U.S. students are invariably outscored by students from rival industrial nations. One review of international tests found that American schoolchildren placed last frequently.

Now this is a competition we must reenter with a new vigor, if we are to keep faith with the American dream, and if we hope to remain the preeminent supplier to the world of sophisticated equipment and see our children earn rewards of an advanced economy and to escape the trade balance sheet of an underdeveloped country, we must face some stark facts.

A look at Japan, our principal industrial competitor, reveals the key. What is ardently respected in the home and rigorously taught in the schools translates into superiority on the factory floors and in the marketplaces of the world. In Japan, according to Harvard Prof. Merry White, any worker on the factory floor can be expected to understand statistical materials, work from complex graphs and charts and perform sophisticated mathematical operations. His typical American counterpart cannot do these things.

Mind you, the Japanese don't spend any more money on education than we do, but they take more interest in it. Diane Ravitch, the noted historian of education, gets to the nub of the problem: "respect for education." She cites a study that compares Japanese and American attitudes. "Whereas Japanese parents are quite critical of the quality of their schools, even when they are producing outstanding results, American parents tend to be satisfied even when their children's schools are ineffectual."

The result is that the Japanese schoolchildren go to school 240 days a year, do 2 hours of homework each day, uniformly take the tougher advanced courses in math, science, and languages and accept the dictum that hard work pays off. American kids go to school 180 days a year, do an average one-half hour's homework a day, avoid the advanced courses in math, science, and foreign languages and prefer the "snap" courses. The predominant peer group attitude in America is to look for the easy way out, and then, in self-defense, ridicule academic achievers.

The bottom line is this: At fifth grade level, according to a recent study, the worst Japanese class was ahead of the best American class in math. Further along the line, the average high school grad-

uate in Japan is as well educated as the average college graduate here. The Europeans, particularly the Germans and the Russians, also outperform American students.

Of course, the American population is just an amalgam of all these better-scoring peoples. So we can't logically blame our genes and ought to look elsewhere for explanations of this calamity. Americans simply have developed a nonchalance about education. They have had such a long stretch of good luck times, of lucky good times, in this country, that they could get along without pounding the books and feel their kids can too.

Well, times have changed since the backwardness of our competitors in the worlds, the unique plenty of our natural resources and our immunity from the ravages of world wars helped us to an easy superiority in world commerce. This led to the idea that there's an easy way out, that the budget doesn't have to be balanced, that it doesn't matter if Johnny's diploma represents empty courses, half learned.

We must find our way out of this inferiority-through-slackness, or we'll be jolted out of it by lost markets, trade deficits, and national humiliations. Why not draw on our old wisdom. the kind the immigrants had, the kind that still motivates the latest wave of immigrants, the Asians.

If the present trend isn't dramatically reversed, the United States could forfeit its technological leadership. Our country relies for its technology on a small scientific elite. In contrast, such rival powers as Japan, West Germany, and the Soviet Union are building a broad base. From 70 to 90 percent of their high school graduates are proficient in math and science, scarcely 6 percent of U.S. graduates have achieved the same proficiency.

This could pass an invisible sentence on America. There are indications, in fact, that it has already inflicted a degree of paralysis upon the Nation. Teachers are notoriously underpaid. The best-qualified are lured away from the school room by higher paying jobs. Those who remain, return for their monthly mite, are expected not only to teach but to maintain discipline, police the halls and practice child psychology. All too often, they are also expected to provide the upbringing that many children fail to get at home.

Yet the training and indoctrination of a new high-technology generation cannot be left to our overburdened schools alone, it must start in the home. Our best students invariably are new arrivals, usually Asian-Americans, who landed on our shores sometimes unable to speak English. Their success in school, educators tell me, can be attributed to their home environment. They came from strong families that respect education.

Now the rush into the future, meanwhile, is fiercely opposed by many Americans who cling desperately to the present. Like the Luddites of 19th century England who tried to stop the industrial revolution by destroying factories, today's recalcitrants would like to halt the advance into the high-technology age. They are bewildered by the complexities. Most of all, they fear the technological revolution will deprive them of their livelihood and destroy society as they know it. Even many intellectuals are fearful of the future. They produce antiscience novels and movies about computers that whirl out of control and fail-safe devices that fail.

But whether some people like it or not, technological progress cannot be reversed, and just as surely as our grandfathers had to give up the horse and buggy, our children will have to abandon the old ways and adjust to the new.

In the end, they will find greater challenges, more productive livelihoods and an expansion of personal horizons. Hopefully, they will inherit a society glimpsed by Abraham Lincoln 125 years ago, "whose course shall be onward and upward, and which, while the Earth endurs, shall not pass away."

This is the aim at least of the Young Astronaut Program. We believe young Americans are not so shrunken from their pioneer stock that they will reject the great adventure awaiting them in outer space. We hope to stimulate them, to stir their imaginations and, in the process, to encourage them to study the sciences.

An important young astronaut objective is to promote "peace through space," to develop a sense of the great immensity of space, and in comparison, the infinitesmal size of the Earth. The young astronauts view the Earth as merely an oversized spaceship hurtling through the heavens. Any damage to its parts could endanger its entire human manifest. Already, the young astronauts have established ties with Russia's young cosmonauts, and more than 40 nations have expressed interest in joining Young Astronauts International.

Historically, it has been discoveries—whether the opening of new continents or new vistas of knowledge—that have made progress possible. Well, fantastic discoveries await our children, if we adults will provide the way.

According to the projections of the National Space Commission, the first space explorers will land on Mars in the year 2017. I believe they will be Americans and will report to Earth from the landing site that they got their start with the Young Astronaut Program.

Thank you.

[The prepared statement of Mr. Anderson follows:]

Young Astronaut Council • 1211 Connecticut Avenue, N.W., Suite 800 • Washington, D.C. 20036 • (202) 682-1985

Honorary Chairman
Ronald Reagan
Honorary Vice Chairman
Senator Jake Garn
Honorary Vice Chairman
Senator John Glenn
Honorary Vice Chairman
Rep. William Nelson

Executive Committee:
Chairman
Jack Anderson
Vice Chairman
Hugh Downs
Secretary
Harold Burson

Executive Director
T. Wendell Butler

TESTIMONY

BEFORE

THE HOUSE COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS

SUBCOMMITTEE ON CONSUMER AFFAIRS AND COINAGE

ON H.R. 2578

THE YOUNG ASTRONAUT MEDAL ACT

TUESDAY, APRIL 22, 1986

BY

JACK ANDERSON

My name is Jack Anderson. I am Chairman of the Young Astronaut Council. I have asked to appear before the subcommittee to urge the passage of H.R. 2578, the Young Astronaut Program Medal Act.

In behalf of a quarter-million Young Astronauts who have already enrolled in the program and the million children who are expected to enroll by the end of the year, I want to thank the man who introduced this bill, a leader and stalwart of the Congress -- your own Chairman Frank Annunzio.

Congressman Annunzio has moved out in front of the millions of concerned Americans who will never take a back seat but are determined to stay in the driver's seat as mankind soars into space. For his leadership, Chairman Annunzio has earned the gratitude of Young Astronauts in all 50 states and 18 foreign countries -- and if I know these warm, willing wonderful children, he'll be receiving unsolicited thank-you letters from many of them.

H.R. 2578, if enacted, will give the Young Astronaut Program the impetus it needs to prepare our children for the 21st century.

The youngsters who started school this year will graduate from college in the 21st Century -- in a fabulous age of exploration, with distant planets within their reach. Our children can lead America into a new era of discovery, achievement and prosperity beyond imagination. Or they can inherit a second-rate America, unable to cope with its multiplying problems and shrinking resources.

Admittedly today is a difficult time to be young. Our children have become jaded and bored, beset by harmful diversions and short on emulations to excellence. Yet a free society cannot drive its youth to excellence: they must be inspired.

Every generation should have a dream to inspire it and adventure to ennoble it. Happily, never has circumstance held forth to young people an incentive to rise above themselves such as space now offers. For half a millennium, the spirit of maximum adventure has awaited the dawn of a new age of Columbuses and Magellans. Now, for our children, it is a hand on a scale infinitely more vast.

Young people are already fascinated by space. To channel that fascination into the hot pursuit of the studies required for the exploration and settlement of other worlds, to make schoolwork less forbidding by dramatizing that it is the key to the universe beyond, to attact students to the tough disciplines that are prerequisite to tackling the challenge of the stars -- that is the objective of the Young Astronauts.

President Reagan has established the Young Astronaut program as a catalyst to stimulate interest in the technologies of tomorrow. The purpose is not necessarily to train future astronauts nor to tansform our youth into scientists. Whatever careers they choose, they will need to understand the terminology and use the tools of the Technological Age. The purpose is to shake young Americans

60-208 O - 86 - 2

out of the doldrums and prepare them for the technological challenges.

I regret to report that our kids are woefully ill prepared for the future. They must master computers, lasers, robots and microwaves: they must understand advanced math, physics, electronics and the rest. This will be absolutely essential in the next decade: otherwise they won't be able to operate the everyday equipment of the future.

Yet as the technological challenges have increased, the educational standing of Young Americans has fallen. Our schools do not adequately teach the scientific skills that will be needed after graduation.

There was a time when passionate respect for education seemed to be a hallmark of American life. We were the first people to embrace the goal of free schooling, not just for a privileged elite, but for all the people. The sacrifices made by earlier generations of Americans to get their children educated are legends that are true. The school complexes that today dominate even our smallest towns, flanked by their fleets of yellow buses, are pervasive testimony to a continuing commitment.

But if the commitment is broad, it is also thin -- so thin that education in America is today falling dangerously behind that of other advanced nations. We put up the buildings, and we hand out diplomas by the millions. But the quality of education has declined. In comparative tests, U.S. students are invariably outscored by students from rival

industrial nations. One review of international tests found that American schoolchildren "placed last frequently."

This is a competition we must reenter with a new vigor if we are to keep faith with the American dream. And if we hope to remain the preeminent supplier to the world of sophisticated equipment, and to see our children earn rewards of an advanced economy and to escape the trade balance sheet of an underdeveloped country, we must face some stark, facts.

A look at Japan, our principal industrial competitor, reveals the key: what is ardently respected in the home and rigorously taught in the schools translates into superiority on the factory floors and in the marketplaces of the world. In Japan, according to Harvard's Professor Merry White, "any worker on the factory floor can be expected to understand statistical materials, work from complex graphs and charts, and perform sophisticated mathematical operations." His typical American counterpart cannot do these things.

Mind you, the Japanese don't spend any more money on education than we do, but they take more interest in it. Diane Ravitch, the noted historian of education, gets to the nub of the problem: "respect for education." She cites a study that compares Japanese and American attitudes: "Whereas Japanese parents are quite critical of the quality of their schools, even when they are producing outstanding results, American parents tend to be satisfied even when their children's schools are ineffectual."

The result is the Japanese schoolchildren go to school 240 days days a year, do two hours of homework each day,

uniformly take the tougher, advanced courses in math, science and languages, and accept the dictum that hard work pays off. American kids go to school 180 days a year, do an average half-hour's homework a day, avoid the advanced courses in math, science and foreign languages and prefer the snap courses. The predominant peer group attitude in America is to look for the easy way out and, then, in self-defense, to ridicule academic achievers.

The bottom line is this: At fifth grade level, according to a recent study, the worst Japanese class was ahead of the best American class in math. Further along the line, the average high school graduate in Japan is as well educated as the average college graduate here. The Europeans, particularly the Germans and Russians, also outperform American students.

Of course, the American population is just an amalgam of all these better-scoring peoples. So we can't logically blame our genes and ought to look elsewhere for explanations of this calamity. Americans simply have developed a nonchalance about education. They have had such a long stretch of lucky good times in this country that they could get along without pounding the books and feel their kids can, too.

Times have changed since the backwardness of our competitors in the world, the unique plenty of our natural resources and our immunity from the ravages of world wars helped us to an easy superiority in world commerce. This led to the idea that there's an easy way out, that the budget

doesn't have to be balanced, that it doesn't matter if Johnny's diploma represents empty courses, half learned.

We must find our way out of this inferiority-through-slackness, or we'll be jolted out of it by lost markets, trade deficits and national humiliations. Why not draw on our old wisdom, the kind the immigrants had, the kind that still motivates the latest wave of immigrants, the Asians.

If the present trend isn't dramatically reversed, the United States could forfeit its technological leadership. Our country relies for its technology on a small scientific elite. In contrast, such rival powers as Japan, West Germany and the Soviet Union are building a broad base. From 70 to 90 percent of their high school graduates are proficient in math and science; scarcely six percent of U.S. graduates have achieved the same proficiency. This could pass an invisible sentence on America. There are indications, in fact, that it has already inflicted a degree of paralysis upon the nation.

Teachers are notoriously underpaid; the best qualified are lured away from the schoolroom by higher paying jobs. Those who remain, in return for their monthly mite, are expected not only to teach but to maintain discipline, police the halls and practice child psychology.

All too often, they are also expected to provide the upbringing that many children fail to get at home. Yet the training and indoctrination of a new high-tech generation cannot be left to our overburdened schools alone. It must start in the home.

Out best students invariably are new arrivals, usually Asian-Americans, who landed on our shores sometimes unable to speak English. Their success in school, educators tell me, can be attributed to their home environment. They came from strong families that respect education.

The rush into the future, meanwhile, is fiercely opposed by many Americans who cling desparately to the present. Like the Luddites of 19th century England who tried to stop the Industrial Revolution by destroying factories, today's recalcitrants would like to halt the advance into the high-tech age. They are bewildered by the complexities; but most of all, they fear the Technological Revolution will deprive them of their livelihoods and destroy society as they know it. Even many intellectuals are fearful of the future; they produce anti-science novels and movies about computers that whirl out of control and fail-safe devices that fail.

But whether some people like it or not, technological progress cannot be reversed and, just as surely as our grandfathers had to give up the horse-and-buggy, our children will have to abandon the old ways and adjust to the new. In the end, they will find greater challenges, more productive livelihoods and an expansion of personal horizons. Hopefully, they will inherit a society glimpsed by Abraham Lincoln 125 years ago, "whose course shall be onward and upward, and which, while the earth endures, shall not pass away."

This is the aim at least of the Young Astronaut Program. We believe young Americans are not so shrunken from their

pioneer stock that they will reject the great adventure awaiting them in outer space. We hope to stimulate them, to stir their imaginations and, in the process, to encourage them to study the sciences.

An important Young Astronaut objective is to promote "Peace Through Space," to develop a sense of the great immensity of space and, in comparison, the infinitesmal size of the earth. The Young Astronauts view the earth as merely an oversize spaceship hurtling through the heavens. Any damage to its parts could endanger its entire human manifest. Already, the Young Astronauts have established ties with Russia's Young Cosmonauts, and more than 40 nations have expressed interest in joining Young Astronauts International.

Historically, it has been discoveries -- whether the opening up of new continents or of new vistas of knowledge -- that have made progress possible. Fantastic discoveries await our children if we adults will provide the way.

According to the projections of the National Space Commission, the first space explorers will land on Mars in the year 2017. I believe they will be Americans and will report to earth from the landing site that they got their start in the Young Astronaut Program.

Chairman ANNUNZIO. Thank you very much, Mr. Anderson, for an outstanding statement.

As a former teacher in the Chicago high schools, I want you to know that I wholeheartedly agree with your objectives in the program. I am sure that the American people will continue to cooperate with the young astronauts, and that the achievements will reach the heights that you have so adequately pointed out in your testimony.

At this time, I would like to recognize the ranking Republican on the subcommittee, Mr. Hiler.

Mr. HILER. I thank the chairman for yielding. I apologize for being late. My plane was delayed en route. I too want to lend my support to this program today and look forward to its eventual passage on the floor of the House to correspond with the legislation that was passed in the other body, so that a source of additional credibility and needed funding can be provided, which will help the Young Astronaut Program continue to invoke the enthusiasm of our Nation's young people as they look to space and the next frontiers, and science and the other areas that will be so critical in the development of our country into the next century. And I applaud Mr. Anderson for his tremendous leadership and insight in this area. Thank you.

Chairman ANNUNZIO. Thank you. Mr. Wylie.

Mr. WYLIE. I think maybe what I would prefer to do is use the time to hear from the rest of the witnesses right now.

Chairman ANNUNZIO. I thank you very much. I want to inform the witnesses that when you are finished today, if we have time, I have worked out a parliamentary procedure with the Republicans on this subcommittee, so there will be no objections, and hopefully, we are going to pass your bill this morning.

Mr. ANDERSON. Thank you, Mr. Chairman.

Mr. WYLIE. Mr. Anderson, you are going to stick around until the other witnesses have testified, aren't you?

Mr. ANDERSON. I will just stay around till it's passed.

[Laughter.]

Mr. WYLIE. That's why I didn't want to delay the proceeding any further, you see. [Laughter.]

Chairman ANNUNZIO. I recognize Thomas DeCair, Associate Administrator for External Affairs of NASA.

Mr. DeCair.

STATEMENT OF THOMAS P. DeCAIR, ASSOCIATE ADMINISTRATOR FOR EXTERNAL AFFAIRS, NASA

Mr. DECAIR. Mr. Chairman and distinguished members of the subcommittee.

Chairman ANNUNZIO. Proceed in your own manner, and if you don't read your entire prepared statement, I am asking unanimous consent that the entire statement be made part of the record.

Mr. DECAIR. Thank you, Mr. Chairman.

I appreciate the opportunity to appear before the subcommittee today to discuss the work of the Young Astronaut Council. The Young Astronaut Council and NASA enjoy a very special relationship, a partnership, for the benefit of our Nation's children. We are

working together to create a dynamic educational network to help prepare our children to become productive citizens of the next century.

Productive and informed citizens, as Jack pointed out, are essential to this Nation maintaining its position of leadership in high technology.

As Jack also mentioned, a very telling point, that children who started school this year will graduate from college in the 21st century, and when they do, they must be able to use the tools of the technological age.

NASA and the Young Astronaut Council have been working together to achieve a single goal, preparing our Nation's children so they can lead America into a new era of discovery, achievement, and prosperity. Most recently, the Young Astronaut Council has worked very closely with NASA to support and expand the educational programs developed by NASA in conjunction with the Teacher in Space project, about which you will hear more in a moment.

The Young Astronaut Council shares many of NASA's educational goals. Through the Young Astronaut Council, NASA-developed space-related educational materials are distributed to young astronaut chapters sponsored by schools, community groups, and interested businesses with the ultimate goal of encouraging elementary and junior high school students to study science, mathematics, technology, and related subjects. The Young Astronaut Council has created an innovative educational program that captures the excitement of the U.S. Space Program and helps classroom teachers stimulate student learning.

We at NASA know how effective the study of space can be in the classroom. We know that the study of space generates excitement and motivates learning as few other subjects can.

On April 17, 1985, President Reagan, who is honorary chairman of the Young Astronaut Council, described the Young Astronaut Council as follows:

This partnership of educators, parents, business, industry, and professional groups has enthusiastically seized the initiative to improve the science and mathematical ability of our youth.

We at NASA are proud to be committed members of this partnership, and we salute the outstanding efforts of the Young Astronaut Council.

Thank you, Mr. Chairman.

[The prepared statement of Mr. DeCair on behalf of NASA follows:]

STATEMENT

OF

Mr. Thomas P. DeCair
Associate Administrator for External Relations

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

before the

Subcommittee on Consumer Affairs and Coinage
Committee on Banking, Finance and Urban Affairs
U.S. House of Representatives

Mr. Chairman and Distinguished Members of the Subcommittee:

I appreciate the opportunity to appear before the Subcommittee today to discuss the work of the Young Astronaut Council.

The Young Astronaut Council and NASA enjoy a special relationship -- a partnership -- for the benefit of our Nation's children. We are working together to create a dynamic educational network to help prepare our children to become productive citizens of the 21st century. Productive and informed citizens are essential to this Nation maintaining its position of leadership in the world of high technology.

The children who started school this year will graduate from college in the 21st century. They must be able to use the tools of the technological age. NASA and the Young Astronaut Council have been working together to achieve a single goal: preparing our Nation's children so they can lead America into a new era of discovery, achievement, and prosperity.

Most recently, the Young Astronaut Council has worked with NASA to support and expand the educational programs developed by NASA in conjunction with the Teacher in Space Project.

The Young Astronaut Council shares many of NASA's educational goals. Through the Young Astronaut Council, NASA-developed space-related educational materials are distributed to Young Astronaut chapters sponsored by schools, community groups, and interested businesses, with the ultimate goal of encouraging elementary and junior high school students to study science, mathematics, technology, and related subjects.

The Young Astronaut Council has created an innovative educational program that captures the excitement of the United States space program and helps classroom teachers stimulate student learning. We at NASA know how effective the study of space can be in the classroom, and we know that the study of space generates excitement and motivates learning as few other subjects can.

On April 17, 1985, President Ronald Reagan, Honorary Chairman of the Young Astronaut Council, described the Young Astronaut Council as follows:

> This partnership of educators, parents, businesses, industry, and professional groups has enthusiastically seized the initiative to improve the science and mathematical ability of our youth.

We at NASA are proud to be committed members of this partnership. We salute the outstanding efforts of the Young Astronaut Council.

Chairman ANNUNZIO. We thank you very much for your excellent statement.

Our next witness is Peter Billingsley, who has been acting professionally since he was 2½ years old. He starred in the box office smash, "A Christmas Story," cohosted the hit show "Real People" and was featured in several Hershey Chocolate Syrup commercials. Peter became involved in the Young Astronaut Program, as he believes its curriculum of math and science will prepare children for the space and technological changes of the future.

Mr. Billingsley, you can proceed in your own manner, and I ask unanimous consent that your entire statement may be made part of the record.

Mr. Billingsley.

STATEMENT OF PETER BILLINGSLEY, ACTOR AND SPOKESKID FOR THE YOUNG ASTRONAUT PROGRAM

Mr. BILLINGSLEY. Thank you, Mr. Chairman.

Before I start, though, I would like to please make you an honorary member of the young astronauts, and by doing that I would like to give you and your staff some pins.

Chairman ANNUNZIO. No greater honor can come to me. [Laughter.]

Thank you. Give the other members of the subcommittee one.

Mr. BILLINGSLEY. Good morning, Mr. Chairman, members of the subcommittee.

My name is Peter Billingsley, and I am the spokeskid for the young astronauts. I am very honored to be here today, Mr. Chairman. This is my first opportunity ever to testify before a congressional committee, and I thank you.

Chairman ANNUNZIO. You are probably the youngest witness we have ever had on this subcommittee.

Mr. BILLINGSLEY. Every generation needs a dream to inspire it. Columbus dreamed of finding the new world. American pioneers dreamed of settling the frontier west of the Mississippi. Our parents dreamed of slipping the bonds of Earth and sending man into space. But my generation, Mr. Chairman, my generation dreams of exploring galaxies and planets way beyond our own and creating new frontier for our children.

Mr. Chairman, I am preparing myself for the challenges of life in the 21st century. I as a young astronaut and through the excitement of the manned and unmanned U.S. Space Program, the Young Astronaut Council develops interesting and fun learning materials to teach kids more about math, science, and technology. We assemble and launch model rockets. We study star charts to locate the planets. We use magnetic marbles to understand magnetic fields, and we even use paddle balls to demonstrate the forces of gravity.

There are many more activities that young astronauts participate in that can help us learn more about the science of our future.

On behalf of all the members of the young astronauts, Mr. Chairman, I want to thank you for introducing H.R. 2578, the Young Astronaut Medal Act. This legislation serves to recognize the importance of the Young Astronaut Program and its dedication to en-

couraging excellence in math and science. The medals will serve to create a greater awareness of the Young Astronaut Program, and even more importantly, their sales will provide the necessary funding to help support the develop of new chapters and new curriculum materials.

Some day an astronaut who has walked on the surface of Mars will come before a committee of the Congress, and I am confident that he or she will have begun their adventures as a young astronaut.

Thank you.

Chairman ANNUNZIO. Thank you very much, Peter. [Applause.]

I am sure your testimony will be widely read and reported, and you have contributed much by your testimony to the will of the American people to go forward with the Space Program. We are not going to let any accident deter us from going forward and with young people like yourself paving and pointing the way, I am sure that the Space Program will continue and reach its objectives on behalf of the American people. So we thank you, Peter, for your testimony.

Mr. BILLINGSLEY. Thank you.

[The prepared statement of Mr. Billingsley follows:]

STATEMENT PREPARED BY PETER BILLINGSLEY FOR DELIVERY BEFORE THE HOUSE OF REPRESENTATIVES COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS AND SUBCOMMITTEE ON CONSUMER AFFAIRS AND COINAGE

GOOD MORNING, MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE. MY NAME IS PETER BILLINGSLEY AND I AM THE SPOKESKID FOR THE YOUNG ASTRONAUTS. IT IS A PLEASURE FOR ME TO BE HERE TODAY. THIS IS MY FIRST OPPORTUNITY TO TESTIFY BEFORE A CONGRESSIONAL COMMITTEE. I AM HONORED THAT YOU INVITED ME TO SPEAK, MR. CHAIRMAN.

EVERY GENERATION NEEDS A DREAM TO INSPIRE IT. COLUMBUS DREAMED OF FINDING THE NEW WORLD; AMERICAN PIONEERS DREAMED OF SETTLING THE FRONTIER BEYOND THE MISSISSIPPI; AND OUR PARENTS DREAMED OF SLIPPING THE BONDS OF THE EARTH AND SENDING MAN INTO SPACE. MY GENERATION, MR. CHAIRMAN, DREAMS OF EXPLORING GALAXIES AND PLANETS BEYOND OUR OWN, AND CREATING NEW FRONTIERS FOR OUR CHILDREN.

MR. CHAIRMAN, I AM PREPARING MYSELF FOR THE CHALLENGES OF LIFE IN THE 21ST CENTURY. I AM A YOUNG ASTRONAUT. THROUGH THE EXCITEMENT OF THE MANNED AND UNMANNED UNITED STATES SPACE PROGRAM, THE YOUNG ASTRONAUT COUNCIL DEVELOPS INTERESTING AND FUN LEARNING MATERIALS TO TEACH KIDS MORE ABOUT MATH, SCIENCE AND TECHNOLOGY. WE ASSEMBLE AND LAUNCH MODEL ROCKETS, STUDY STAR CHARTS TO LOCATE THE PLANETS, USE MAGNETIC MARBLES TO UNDERSTAND MAGNETIC FIELDS AND USE

PADDLEBALLS TO DEMONSTRATE THE FORCES OF GRAVITY. THERE ARE MANY MORE ACTIVITIES THAT YOUNG ASTRONAUTS DO THROUGHOUT THE SCHOOL YEAR THAT HELP US LEARN MORE ABOUT THE SCIENCE OF OUR FUTURE.

ON BEHALF OF ALL THE MEMBERS OF THE YOUNG ASTRONAUTS, MR. CHAIRMAN, I WANT TO THANK YOU FOR INTRODUCING H.R. 2578, THE YOUNG ASTRONAUT MEDAL ACT. THIS LEGISLATION SERVES TO RECOGNIZE THE IMPORTANCE OF THE YOUNG ASTRONAUT PROGRAM AND ITS DEDICATION TO ENCOURAGING EXCELLENCE IN MATH AND SCIENCE. THE MEDALS WILL SERVE TO CREATE A GREATER AWARENESS OF THE YOUNG ASTRONAUT PROGRAM, AND MORE IMPORTANTLY, THEIR SALES WILL PROVIDE THE NECESSARY FUNDING TO HELP SUPPORT THE DEVELOPMENT OF NEW CHAPTERS AND NEW CURRICULUM MATERIALS.

SOMEDAY, AN ASTRONAUT WHO HAS WALKED ON THE SURFACE OF MARS WILL COME BEFORE A COMMITTEE OF THE CONGRESS. I AM CONFIDENT THAT HE OR SHE WILL HAVE BEGUN THEIR ADVENTURE INTO SPACE AS A YOUNG ASTRONAUT.

THANK YOU.

Chairman ANNUNZIO. Our next witness is Mr. Richard A. Methia, teacher and 1 of the 10 finalists in the Teacher in Space Program.

Mr. Methia.

STATEMENT OF RICHARD A. METHIA, TEACHER AND 1 OF THE 10 FINALISTS IN THE TEACHER IN SPACE PROGRAM

Mr. METHIA. Good morning, Mr. Chairman, Mr. Hiler, Mr. Wylie. Thank you for allowing me to express my views this morning on the legislation.

Chairman ANNUNZIO. I ask unanimous consent that your entire statement be printed in the record.

Mr. METHIA. Thank you, sir.

I speak to you this morning as a finalist in the Teacher in Space project on loan from NASA to the Young Astronaut Program. But I think I speak to you this morning primarily as a teacher.

I would first like to share with you a beautiful prose passage which appeared in Discover magazine recently. The unsigned author of this passage offered this observation about space and the future of our children, and I quote.

> Most Americans will never go into space, but their children and their children's children will. The space program has become a kind of national monument—our bequest to future generations.

And the author continues.

> * * * 80 years after we learned to fly and 5000 years after we learned to write, the future is still up for grabs. * * * Ours is the generation to which it has fallen to take the steps outward from the earth. Perhaps it will be said that in the brief time allotted, we ran as fast and reached as high as we could.

This passage, Mr. Chairman, speaks eloquently for our common determination to press on in the face of tragedy, not for our own sake, but for the sake of our children. And today, I am pleased to report that nowhere is that determination more strongly expressed than in the classrooms of America.

Yesterday, Mr. Chairman, I flew from Washington, DC, to Harrisburg, PA, where I had the opportunity to see that dream alive and well, thanks to a very special person and a very special program. The person is Patricia Fontaine, a highly gifted elementary school teacher with boundless energy. The program is the Young Astronaut Program, of which Mrs. Fontaine is a local chapter leader. Together, Pat and her young astronaut chapter at Marshall Elementary School in Harrisburg, took us, her invited guests, on a trip aboard the space shuttle, the culmination of a month of intensive classroom activity. Mrs. Fontaine and her classes staged a dramatic mock shuttle flight from lift off to landing, even including a space walk to repair a damaged satellite. It was a wonderfully inventive, entertaining, and educational event. And I might add, Mr. Chairman, that she received an extraordinary amount of public coverage. Three television stations, print media, and radio.

And that is perhaps one of the more important lessons those youngsters learned, that it wasn't necessary to do something destructive to head the evening news.

With those homemade costumes and that cardboard spaceship, Mrs. Fontaine and her young astronauts journeyed far beyond an

imaginary Earth orbit. On the wings of her guidance and her creative energies, she brought those youngsters on a voyage to genuine learning, not just about math, science, English skills, important though they are, but on a voyage of learning about themselves, self-discovery.

To have seen the seriousness of purpose in those elementary school youngsters was to witness first hand what a phenomenally creative program in the hands of phenomenal teacher can do to generate enthusiasm for learning among our young.

Though Pat Fontaine and her students are special, they are not unique. Earlier this month I watched young astronauts in Ocean City, MD, prepare for a national academic competition. The week before I was privileged to participate in a community education night sponsored by the young astronauts chapters at Quantico, VA, school.

I have crisscrossed this country, Mr. Chairman, these past 8 months, and I have seen similar stories nearly everywhere I have gone. Teachers and their young astronauts engaged in the wonderful adventure of learning.

As a teacher myself, and as a former teacher, Mr. Chairman, I am sure you can appreciate what I say, I am always pleased to hear about good things happening in our schools. The Young Astronaut Program, Mr. Chairman, is not only good news, it is great news. It is an educationally sound, efficient, economical program which promises to make a significant contribution to our youngsters.

In my travels, I have seen it provide impetus for learning, even among the most disinterested students. I know that I speak for thousands of my colleagues around the country. I am delighted to hear that you join me when I urge support for this legislature. By assisting the Young Astronaut Program, we ultimately will be serving thousands of youngsters in America's classrooms and helping them prepare for their future in the world of tomorrow.

Thank you.

[The prepared statement of Mr. Methia follows:]

Statement of

Richard Anthony Methia

National Finalist, NASA Teacher In Space Project

Subcommittee on Consumer Affairs and Coinage
Committee on Banking, Finance and Urban Affairs
United States House of Representatives

March 22, 1986

Mr. Chairman and distinguished members of the subcommittee:

Thank you for allowing me to express my views concerning the legislation before you.

I would first like to share with you a beautiful prose passage which appeared in Discover Magazine. The unsigned author offered this observation about space and children:

"Most Americans will never go into space, but their children and their children's children will. The space program has become a kind of national monument--our bequest to future generations.

"...80 years after we learned to fly and 5,000 years after we learned to write, the future is still up for grabs. ...Ours is the generation to which it is fallen to take the steps outward from the earth. Perhaps it will be said that in the brief time allotted to us we ran as fast and reached as high as we could."

This passage speaks eloquently for our common determination to press on in the face of tragedy, not for our own sake, but for our children's sake. And today I am pleased to report that nowhere is that determination more strongly expressed than in the classrooms of America.

Yesterday, I flew from Washington to Harrisburg, Pennsylvania, where I had the opportunity to see that dream alive and well thanks to a very special person and a very special program. The person is Patricia Fontaine, a highly gifted elementary school teacher with boundless energy. The program is the Young Astronaut Program of which Mrs. Fontaine is a chapter leader. Together, Pat and her Young Astronaut Chapter at Marshall Elementary School in Harrisburg took her invited guests on a trip aboard the space shuttle. The culmination of a month of intensive classroom activity, Mrs. Fontaine and her classes staged a dramatic mock shuttle flight from liftoff to landing even including a space walk to repair a damaged satellite. It was wonderfully inventive, entertaining and educational.

But with those homemade costumes and that cardboard spaceship Mrs. Fontaine and her Young Astronauts took a journey far beyond earth's orbit. On the wings of her caring guidance and creative energy, she brought those youngsters on a voyage to genuine learning--not just about math, science and English skills--important though they are--but a voyage of learning about themselves. To have seen the seriousness of purpose in these elementary school

youngsters was to witness firsthand what a creative program in the hands of a creative teacher can do to generate enthusiasm for learning.

Though Pat Fontaine and her students are special, they are not unique. Earlier this month I watched Young Astronauts in Ocean City, Maryland, prepare for a national academic competition, and the week before that I was privileged to participate in a Community Education Night sponsored by the Young Astronaut Chapters at the Quantico, Virginia, Schools. I have crisscrossed the country these past eight months, and I have seen similar stories nearly everywhere I have gone--teachers and their Young Astronaut Chapters engaged in the wonderful adventure of learning.

As a teacher I am always pleased to hear about good things happening in our schools. The Young Astronaut Program is not only good news, it's great news. It is an educationally sound, efficient, economical program which promises to make a significant contribution to our schools. In my travels, I have seen it provide the impetus for learning even among the most disinterested students. I know that I speak for thousands of my colleagues around the country when I urge you to support this legislation. By assisting the Young Astronaut Program, you will ultimately be serving thousands of youngsters in America's classrooms, helping them prepare for their future in the high-tech world of tomorrow. Thank you.

Chairman ANNUNZIO. I thank you for a very, very good statement.

Ms. Kira Sternburg, young astronaut from Piney Branch Elementary School, Takoma Park, MD, is our next witness. Ms. Sternburg.

STATEMENT OF KIRA STERNBURG, YOUNG ASTRONAUT MEMBER, PINEY BRANCH ELEMENTARY SCHOOL, TAKOMA PARK, MD

Ms. STERNBURG. I would like to begin my talk by making a presentation to Chairman Annunzio.

Chairman ANNUNZIO. She wants to make another presentation. Boy, this is my lucky day.

[Presentation.]

[Applause.]

Chairman ANNUNZIO. I thank you. I'm very pleased and really highly honored at the presentation. I want to assure the Young Astronaut Program that this is going to have a place of honor in my office. [Applause.]

Ms. STERNBURG. Mr. Chairman and members of the subcommittee, I am here today to discuss the Young Astronaut Program at Piney Branch Elementary School. This is how we got started.

We found an article in the newspaper about the Young Astronaut Program. It sounded very interesting. We all voted on whether or not we should have the program. Once we were in the program, we talked about drag, lift, the shape of a plane's wings. We discussed how you got along on the space shuttle, how you went to the bathroom, how you ate, and how you washed yourself. We got many questions answered that probably would not have been unless we had the program.

I know that during and after the Young Astronaut Program, I felt better about math and science. Before I came to Piney Branch, I disliked science so much. The program took two subjects that a lot of kids do not like and made them fun. The program helped kids in math and science, and as a result of the program, and my science teacher, Mrs. Johnson, science became my favorite subject.

We went on a field trip to the air and space museum and had a tour. We learned things that we hadn't had any idea about. For the first anniversary of the Young Astronaut Program, 15 of us were chosen to go to the White House. We presented a speech and a banner to NASA. Four young astronauts were also chosen to go to Senator Glenn's office to have their picture taken with him for Parade magazine.

Everybody got really excited about the teacher in space. We watched the news and read the newspaper and found out all about it. Then we found out about the explosion.

At first, when we heard about the space shuttle tragedy, we all felt very sad. We were all very interested in that particular launching because of the space shuttle *Challenger* and the "teacher in space."

Nobody could believe what had happened. We all discussed it in class. After we discussed it with Mrs. Johnson, we all had a better understanding of what had happened and how to feel about it.

We all determined that you have to take risks. As one of the young astronauts said:

"When a baby is learning to walk, he falls down, but he doesn't give up. He keeps trying."

Thank you.

[The prepared statement of Ms. Sternburg follows:]

Piney Branch Elementary School

7510 MAPLE AVENUE
TAKOMA PARK, MARYLAND 20912
TELEPHONE 301-270-9363

Mr. Chairman and members of the Committee. I am here today to discuss the Young Astronaut Program at Piney Branch Elementary School.

This is how we got started. We found an article in the newspaper about the Young Astronaut Program. It sounded interesting. We all voted on whether or not we should have the program. Once we were in the program, we talked about drag, lift, the shape of a plane's wings. We discussed how you got along on the space shuttle, how you went to the bathroom, how you ate, and how you washed yourself. We got many questions answered that probably would not have been answered unless we had the program.

I know that during and after the Young Astronaut Program, I felt better about math and science. Before I came to Piney Branch, I disliked science so much. The program took two subjects that a lot of kids do not like and made them fun. The program helped kids in math and science. As a result of the program, and my science teacher Mrs. Johnson, science became my favorite subject.

We went on a field trip to the Air and Space Museum and had a tour. We learned things we hadn't had any idea about. For the first anniversary of the Young Astronaut Program, fifteen of us were chosen to go to the White House. We presented a speech and a banner to NASA. Four Young Astronauts were also chosen to go to Senator Glenn's office to have their picture taken with him for Parade Magazine.

Everybody got really excited about the teacher in space. Then we found out about the explosion. At first, when we heard about the space shuttle tragedy we all felt very sad. We were all very interested in that particular launching of the space shuttle Challenger because of the "Teacher in Space". Nobody could believe what happened. We all discussed it in class. After we discussed it with Mrs. Johnson, we all had a better understanding of what had happened and how to feel about it. We all determined that you have to take risks. As one of the Young Astronauts said, "When a baby is learning to walk he falls down, but he doesn't give up. He keeps trying."

Chairman ANNUNZIO. Thank you, Kira, for a very excellent statement. I am sure your remarks will be an inspiration to thousands and thousands of young people throughout America.

Ms. STERNBURG. Thank you.

Chairman ANNUNZIO. I am really honored to have you before the subcommittee today.

Ms. STERNBURG. My honor to be here.

Chairman ANNUNZIO. Our next witness is Mrs. Susan G. Akroyd, young astronaut chapter leader and assistant principal at Hutchison Elementary School, Herndon, VA.

STATEMENT OF SUSAN G. AKROYD, YOUNG ASTRONAUT CHAPTER LEADER AND ASSISTANT PRINCIPAL AT HUTCHISON ELEMENTARY SCHOOL, HERNDON, VA

Mrs. AKROYD. Mr. Chairman and subcommittee members, I am not with my principal, Frank Mehm, today and he thought that was better as every time I begin to speak about this program, he never gets a word in anyway.

So he sent me on with two of my students to tell you that Hutchison Elementary School is a school with a population of approximately 900 students. And besides the regular student population, we have there, we have a gifted center, a center for learning disabled students, and a center for emotionally disturbed students.

I only tell you that to let you know that all those students are involved with the 13 chapters that we have at Hutchison, and it has been a success story for every one of the students in that program. So there are approximately 300 students involved with the Young Astronaut Program at Hutchison.

This program has touched our lives in ways that we never really imagined it would. First, we want to look at what happened to children at Hutchison.

Guest speakers from astronaut to a designer of the space station from NASA, an artist, and another astronaut who was a female and on her way with a new baby really gave some insights into the new world of space exploration for the children.

These speakers became models for students of how adults in the real world actually apply creativity and problem solving to new ventures.

High technology became close touch. Young minds were exposed to a multitude of career opportunities that were never before considered.

As children learned about those who made dreams come true, they dared dream the dream themselves. They developed the freedom to take risks by participating in the activities designed by the program, by asking an array of new questions, enormous in scope, and by using imaginations to conceptualize all possible future exploration ventures. Enthusiasm and curiosity were natural outgrowths of this program and what had previously been only textural or media experience for the students actually became one of personal involvement.

Second, the impact of this program upon the teachers was equally significant. They shared a renewed sense of belonging as this program cut across all grade levels from first through sixth grade

in the school, and they felt and continued to agree, that the resources supplied by the Young Astronaut Council provided a breadth and depth which they have only minimally tapped.

Their cries resounded throughout the school every day:

"Oh, we have so much more to do and learn from this program."

Last and a most unexpected surprise for us, and this was our first time to enter into this, was the positivism of the business community toward the program.

Indeed, every time I would make a telephone call to any company to talk about this program and say, "Could you please help us? We need sponsorship for this program, we have so many chapters," invariably, I always received a warm "yes" from every company I contacted.

One of the things I want to bring to you today is something that occurred last Friday. And that is, as I knew I had to come here today and speak, I felt that the persons who really should be here were the children. And since I could not bring all 300 of them, I went to many of those classrooms.

I shared with them what I was about to do today, and I said:

"I really need to know from you, do you think this program is valuable? Has it made a difference in your lives, or hasn't it? What is the impact upon your life? And do you think this program should be one that all children should be involved with, or don't you?"

I would like to just recount a few of the comments, and I bring them exactly as they said to me for you to hear today. I wish I had a video tape of this. I wouldn't have needed to be here if I had the video tape. It was phenomenal.

The seriousness of the students was something I had not expected, and they came out with comments such as the following:

"Well, I didn't read very much before I was involved with this program. Now I get my whole family involved. In fact, every day, my brother asks me, What did you learn in that space program today?"

Another student said:

"You know, this is really like taking a closer look at your future."

Another one said:

"It made you realize what you have to do for the future, and you'd better get serious about it."

Another one said:

"Even if you hear about anything in this program over and over again, doesn't it just make you feel so good about your country?"

What about:

"Well, when I go home and ask my mother about the space program in her day, she doesn't really know very much. But, when I have children some day, I have learned so much, I know I'll be able to tell them so much more." [Laughter.]

In fact, several times, I had tears in my eyes. And I told them it was my contact lens problem. One student said:

"You know, I'm thinking so much about the little children that we have in the program here, and about this class as well. When the shuttle disaster occurred, one thing that helped us all was that

we just continued on with the program. And it sure did help to rebuild our spirit."

One said:

"Gee, what happens with this program for me is it really makes me want time to pass fast so that I can get to the future in a hurry." [Laughter.]

Another one said:

"You know, if you had a dream, what you'd find out from the people you have brought to us is that you can just go on and you can ask all those people who had their dreams come true for them."

One said:

"I'm really glad I am in this program. In any other school—and I won't mention the State—the only thing they ever talked about were the order the plants were in and then they dropped the whole thing."

And three more comments. One said:

"This program helps me remember so much. We're so fortunate to have it. It shows how kids can be involved. When you used to think of NASA and space, you used to think it was only for grownups. Now we know kids can be a part of it all, too."

And two more:

"I used to only notice that the shuttle went up and it came down. Who cared? Now it's become so important to me and it's really taught me about how people feel about the things in the world in general."

And as I walked out of the last class, one little boy said:

"Wait a minute. I have something else to say. This is the first fun thing I have learned in school all year. When people used to talk about space, I'd go ughhhh. But, when they say space now, I say ooooh."

And that was the last comment from the last student that I saw before I left.

Thank you for the privilege of speaking before your subcommittee. I know the 300 students, their teachers and parents would agree that we should bring to you today testimony in the form of a tribute to the Young Astronaut Program for challenging us to reach for the stars. We think at Hutchison that we are halfway there.

[The prepared statement of Mrs. Akroyd follows:]

PREPARED STATEMENT

TO

THE HOUSE BANKING, FINANCE AND URBAN AFFAIRS SUBCOMMITTEE
ON CONSUMER AFFAIRS AND COINAGE

FOR HEARING

ON TUESDAY, APRIL 22, 1986

ON H.R. 2578, THE YOUNG ASTRONAUT PROGRAM MEDAL ACT

PREPARED BY

SUSAN AKROYD

ASSISTANT PRINCIPAL

HUTCHISON ELEMENTARY SCHOOL

STATEMENT

My name is Susan Akroyd. I am assistant principal at Hutchison Elementary School in Herndon, Virginia. This is Mr. Frank Mehm, the principal of our school. Hutchison is a Fairfax County Elementary School which houses approximately 900 students and includes two Chapter One programs, a gifted center, a center for emotionally disturbed students and a center for learning-disabled students. I mention this because the Young Astronaut Program has been a success story for all these children.

The activities of Hutchison's thirteen Young Astronaut Chapters have touched our lives in ways we never imagined. First, let's look at children. Guest speakers from astronaut to artist unknowingly became examples to children of how adults have been challenged to apply creativity and problem-solving to real world issues. "High-tech" became close touch. Young minds were exposed to a multitude of career opportunities never before considered. Females, particularly, saw new areas on the horizon for their futures.

As children learned about those who made dreams come true, they dared dream dreams themselves. They developed the freedom to take risks by participating in the activities designed by the Program, by asking an array of new questions enormous in scope, and by using imaginations to conceptualize future possibilities for science and space exploration. Enthusiasm and curiosity were natural outgrowths of the study of space-related ventures. Children heard from those working in space-related fields about commitment and about the importance of education in the present for opportunities in the future. What had been a text or media experience became personal involvement.

Second, the impact of the Young Astronaut Program on Chapter teachers was equally significant. A renewed sense of belonging and cooperative venture arose among these teachers. They felt, and continue to agree, that the

resources supplied by the Young Astronaut Council provide a breadth and depth which they have only minimally tapped. Their cries resound, "We have so much more to do and learn!" They have summoned enormous energies in working toward skill development and student motivation for learning by integrating the program materials and study of space into all content areas. Children's daily journal writing frequently contains space-related entries. Art work abounds with topics involving space. Science and mathematical concepts & problems mesh with the numerous challenges provided by the Young Astronaut Council and students have become avid readers of space-related narrative and expository text. Recently, the thirteen teachers have developed a grant proposal for staff development time and monies to align the Young Astronaut activities to specific county curriculum areas. Seven additional teachers have requested to participate in the program next year. Teachers' enthusiasm is not to be outdone by the students' excitement! We will be presenting this program at the Management Conference for Fairfax County Public Schools next year with the hope that other schools will realize its potential.

Last, and a most unexpected surprise, was the private sector's support for sponsorship of our Young Astronaut Chapters. One company helped to finance field trips. Another company, with whom we have worked closely, sponsored a Young Astronaut Art Event. The winning entries were placed on exhibit at the Capital Children's Museum and the other entries were displayed at Dulles International Airport. This company donated video equipment to Hutchison and will be exhibiting a project in our science fair. The students have orchestrated a special event for our business "partners" to include a presentation of T-shirts imprinted with a winning Young Astronaut art entry logo for our Chapters.

We intend to pursue other business-community "partnerships" in 1986-87 to assist with sponsorship of twenty chapters; however, our first business support group will be one we hope to continue as that company spurred us on to new heights.

Thank you for the privilege of speaking before your committee. I know 300 students, their teachers and parents would agree that we bring to you today testimony in the form of a tribute to the Young Astronaut Program for challenging us to "Reach for the Stars". We do believe we're halfway there!

Chairman ANNUNZIO. Thank you for an exciting and enthusiastic statement.

Mr. Hiler.

Mr. HILER. Mr. Chairman, I have no questions.

Chairman ANNUNZIO. Mr. Wylie.

Mr. WYLIE. Mr. Chairman, I would just congratulate our panel this morning. Mr. Anderson, your statement certainly was outstanding, and Mr. DeCair and Mr. Methia and Mrs. Akroyd, we certainly appreciate your wonderful and terrific and constructive statements, but I think we will all have to agree that the dramatic statements came from Mr. Billingsley and the young lady here, Ms. Sternburg, whose name tag is hidden from me. That is why I had to look at my notes.

But, I really am glad I came this morning. I will tell you, these are two amazing young people. And the whole panel this morning has given some testimony that's most encouraging and exciting for this member of the panel.

And I thank you very much for what you have done.

Thank you, Mr. Chairman.

Chairman ANNUNZIO. I associate myself with the remarks of my colleague. As chairman of this subcommittee, I have had many panels, many witnesses, many hearings. I want to say that this morning has been one of the most exciting, educational, and emotional hearings we have seen in room 2128 of the House Banking Committee. It has really been a genuine pleasure for me to meet you young people, the teachers, my good and old dear friend whom I've known for one-quarter of a century, Mr. Anderson.

And I want to congratulate him for spearheading this tribe. He came to my office some months ago. I explained to him the rules of the subcommittee, how necessary it was to get 218 signatures. We went over the top. We have 222 signatures, more than enough to pass this legislation under suspension of the rules.

I don't want to take up any more time. We have business at hand, so I am officially adjourning the subcommittee and the hearing is adjourned.

[Whereupon, at 10:57 a.m., the hearing was adjourned to go into executive session.]

[The following statement was received by the subcommittee for inclusion in the record:]

Mr. Chairman, distinguished members of the Committee:

Over the last 20 years, I have come to know a woman of the future named Uhura. She has called me to act now, to do the things humanity must do if she is to ply the galaxy in star ships. One of those activities was helping NASA to recruit women and minorities for the astronaut corps. Judy Resnick, Ron McNair and Elison Onizuka were among that first group. I will always cherish knowing them, but I am not looking back.

This is why I feel it is imperative to support the Young Astronaut Program. I have supported the Young Astronaut Council from White House launch celebration, when it was really no more than a dream, to the growing, dynamic program it is today. The opportunity to place before this distinguished committee a testimony of support for this bill and this program is a priviledge and an honor. My life is inextricably wedded to the future, and these Young Astronauts are our future.